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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,996	06/30/2000	Robert W. Faber	42390.P8384X	1672

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Aloysius T C AuYeung
Blakely Sokoloff Taylor & Zafman LLP
12400 Wilshire Boulevard Seventh Floor
Los Angeles, CA 90025

EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

16

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,996

Applicant(s)

FABER ET AL

Examiner

Brandon Hoffman

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15. 6) ☐ Other:

DETAILED ACTION

1. Claims 1-16 are pending in this office action.
2. Applicant's arguments, see page 12, last paragraph to page 13, first paragraph, filed February 19, 2004, with respect to the rejection(s) of claim(s) 1-16 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Manabu et al. (U.S. Patent No. 6,453,304) in view of Ueda et al. (U.S. Patent No. 6,289,102).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manabu et al. (U.S. Patent No. 6,453,304) in view of Ueda et al. (U.S. Patent No. 6,289,102).

Regarding claim 1, Manabu et al. teaches a system comprising:

- A video source device providing n bits of copy control information to a video recording device (fig. 1 and 3);

- Each of the video source and recording devices practicing a symmetric ciphering/deciphering process employed by the video source and recording devices to protect video transmitted from the video source device to the video recording device (fig. 1, ref. num 304 to 303 and fig. 3, ref. num 402 to 403).

Manabu et al. does not teach each of the video source and recording devices incorporating said n bits of copy control information as part of an initialization value, and initializing a cipher unit with said initialization value.

Ueda et al. teaches each of the video source and recording devices incorporating said n bits of copy control information as part of an initialization value (col. 8, lines 1-35), and initializing a cipher unit with said initialization value (fig. 2a and 2b).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine each of the video source and recording devices incorporating said n bits of copy control information as part of an initialization value, and initializing a cipher unit with said initialization value, as taught by Ueda et al., with the system of Manabu et al. It would have been obvious to combine Each of the video source and recording devices incorporating said n bits of copy control information as part of an initialization value, and initializing a cipher unit with said initialization value, as taught by Ueda et al., with the system of Manabu et al. because the incorporation of copy control bits provides a selection of possible starting encryption values, fig. 2 of

Ueda. This allows different possibilities of encryption based not only on a changing key, but also on changing copy control information.

Regarding claim 5, Manabu et al. teaches a video apparatus comprising:

- A cipher unit to generate a sequence of ciphering bits to cipher video to be transmitted by the video apparatus to a video recording device (fig. 1, ref. num 303), and
- A communication interface coupled to the video recording device to provide said n-bit copy control information to said video recording device (fig. 1, ref. num 307).

Manabu et al. does not teach the cipher unit including a register to be initialized by each of the video apparatus and the video recording device with an initialization value incorporating n bits of copy control information.

Ueda et al. teaches the cipher unit including a register to be initialized by each of the video apparatus and the video recording device with an initialization value incorporating n bits of copy control information (fig. 2a and 2b).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the cipher unit including a register to be initialized by each of the video apparatus and the video recording device with an initialization value incorporating n bits of copy control information, as taught by Ueda et al., with the

apparatus of Manabu et al. It would have been obvious to combine the cipher unit including a register to be initialized by each of the video apparatus and the video recording device with an initialization value incorporating n bits of copy control information, as taught by Ueda et al., with the apparatus of Manabu et al. because the incorporation of copy control bits provides a selection of possible starting encryption values, fig. 2 of Ueda. This allows different possibilities of encryption based not only on a changing key, but also on changing copy control information.

Regarding claim 8, Manabu et al. teaches a video apparatus comprising:

- A cipher unit to generate a sequence of deciphering bits to decipher ciphered video to be received from a video source device (fig. 3, ref. num 403), and
- A communication interface coupled to the video source device to receive said n-bit copy control information from said video source device (fig. 3, ref. num 401).

Manabu et al. does not teach the cipher unit including a register to be initialized by each of the video apparatus and the video source device with an initialization value incorporating n bits of copy control information.

Ueda et al. teaches the cipher unit including a register to be initialized by each of the video apparatus and the video source device with an initialization value incorporating n bits of copy control information (fig. 2a and 2b).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the cipher unit including a register to be initialized by each of the video apparatus and the video source device with an initialization value incorporating n bits of copy control information, as taught by Ueda et al., with the apparatus of Manabu et al. It would have been obvious to combine the cipher unit including a register to be initialized by each of the video apparatus and the video source device with an initialization value incorporating n bits of copy control information, as taught by Ueda et al., with the apparatus of Manabu et al. because the incorporation of copy control bits provides a selection of possible starting encryption values, fig. 2 of Ueda. This allows different possibilities of encryption based not only on a changing key, but also on changing copy control information.

Regarding claim 11, Manabu et al. teaches in a video source device, a method comprising:

- Providing a video recording device with n-bits of copy control information (fig. 1);
and
- Operating said block cipher to generate a key for use by a stream cipher to cipher video to be transmitted to the video recording device (fig. 2, ref. num 3031 and 3032).

Manabu et al. does not teach incorporating said n-bits of copy control information as a part of an initialization value with each of the video source device and the video recording device, and initializing a block cipher with said initialization value.

Ueda et al. teaches incorporating said n-bits of copy control information as a part of an initialization value with each of the video source device and the video recording device (col. 8, lines 1-35), and initializing a block cipher with said initialization value (fig. 2a and 2b).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine incorporating said n-bits of copy control information as a part of an initialization value with each of the video source device and the video recording device, and initializing a block cipher with said initialization value, as taught by Ueda et al., with the device of Manabu et al. It would have been obvious to combine incorporating said n-bits of copy control information as a part of an initialization value with each of the video source device and the video recording device, and initializing a block cipher with said initialization value, as taught by Ueda et al., with the device of Manabu et al. because the incorporation of copy control bits provides a selection of possible starting encryption values, fig. 2 of Ueda. This allows different possibilities of encryption based not only on a changing key, but also on changing copy control information.

Regarding claim 14, Manabu et al. teaches in a video recording device, a method comprising:

- Receiving from a video source device n-bits of copy control information (fig. 3);
and
- Operating said block cipher to generate a key for use by a stream cipher to decipher ciphered video received from the video source device (fig. 2, ref. num 3031 and 3032).

Manabu et al. does not teach incorporating said n-bits of copy control information as a part of an initialization value with each of the video recording device and video source device, and initializing a block cipher with said initialization value.

Ueda et al. teaches incorporating said n-bits of copy control information as a part of an initialization value with each of the video recording device and video source device (col. 8, lines 1-35), and initializing a block cipher with said initialization value (fig. 2a and 2b).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine incorporating said n-bits of copy control information as a part of an initialization value with each of the video recording device and video source device, and initializing a block cipher with said initialization value, as taught by Ueda et al., with the device of Manabu et al. It would have been obvious to combine

incorporating said n-bits of copy control information as a part of an initialization value with each of the video recording device and video source device, and initializing a block cipher with said initialization value, as taught by Ueda et al., with the device of Manabu et al. because the incorporation of copy control bits provides a selection of possible starting encryption values, fig. 2 of Ueda. This allows different possibilities of encryption based not only on a changing key, but also on changing copy control information.

Regarding claims 2, 6, 9, 12, and 15, the combination of Manabu et al. in view of Ueda et al. teaches said initialization value incorporates said n bits of copy control information as its most significant bits (see col. 4, lines 53-59 of Manabu et al.).

Regarding claim 3, the combination of Manabu et al. in view of Ueda et al. teaches each of said initialization of a cipher unit by said video source and recording devices comprises initializing a register of the cipher unit with the copy control information incorporated initialization value (see col. 3, line 57 to col. 4, line 3 of Manabu et al.).

Regarding claims 4, 7, 10, 13 and 16, the combination of Manabu et al. in view of Ueda et al. teaches said initialization of the block cipher unit comprises initializing a register of a round function of the block cipher (see fig. 2 of Manabu et al.).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 703-305-4662. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Brandon Hoff

BH
3/22/04

Ayaz Sheikh
AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100